

09/936,692

9

REMARKS

Entry of the foregoing amendments to the application is requested on the grounds that the claims, as amended, patentably distinguish over the cited art of record or, alternatively, place the application in better condition for appeal. The claims more particularly point out and distinctly claim the subject matter which Applicants regard as the invention. No new issues have been added which would require further consideration and/or search, nor has any new matter been added. The claims as amended are believed to avoid the rejections applied in the Final Office Action for reasons set forth more fully below.

The Office Action of November 20, 2003 has been received and carefully reviewed. It is submitted that, by this Communication, all bases of rejection and objection are traversed and overcome. Upon entry of this Communication, Claims 1-31 remain in the application. Claims 32-49 have been withdrawn by the Examiner as being directed to a non-elected invention. As such, claims 32-49 have been cancelled without prejudice herein. Reconsideration of the claims as amended is requested.

Claims 7, 8, 10 and 22-24 stand rejected under 35 U.S.C 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. The Examiner states that the phrases "hydrophilic derivatives" and "hydrophobic derivatives" are indefinite because nothing indicates what these derivatives might be or which derivatives are suitable or unsuitable for the desired application.

Although Applicants do not acquiesce to this rejection, in order to expedite prosecution, "hydrophilic derivatives" and "hydrophobic derivatives" has been deleted from the claims in which these recitations appeared. As such, Applicants respectfully submit that the rejection under 35 U.S.C. 112, second paragraph has been traversed and overcome.

Claims 1-31 stand rejected under 35 U.S.C. 102(b) as being anticipated by Tezuka et al. (4,089,830), Wilson et al. (4,758,612), Wilson et al. (4,569,954), Englebrecht (4,872,936), Okayabashi et al. (5,051,453) Kato et al. (5,520,725) or National Res Dev Corp (GB 1,507,981). Claims 1-31 also stand rejected under 35 U.S.C. 103(a) as being unpatentable over any of the above references. The Examiner restates the grounds for rejection from the previous Office Action of May 16, 2003.

09/936,692

10

The Examiner states that all of the cited references show the different monomers present in a predetermined ratio. He further states that there is nothing in the claims to indicate the amount of hydrophobic and hydrophilic monomers in the claimed copolymer. He points out that Wilson ('612) specifies 5-70% water insoluble monomer; that Engelbrecht states that 5% of acid containing monomers is sufficient and Engelbrecht's claim 18 requires monomers that do not hydrolyze; that Okabayashi relates a copolymer containing as little as 5% acid containing monomer; and that Kato's claim 1 shows a 5% acidic monomer content. The Examiner concludes that the Applicants' invention as defined in the claims does not recite whether the claimed copolymer is hydrophobic or hydrophilic.

Applicants respectfully submit that independent claims 1 and 18 have been amended to recite that the copolymer is "substantially hydrophobic." Further, claim 18 and dependent claims 11 and 25 have been amended to recite specific amounts of the hydrophilic and hydrophobic monomers. Specifically, the claims as amended recite that the amount of the hydrophilic monomer ranges between about 1% and about 25% of the copolymer, and the amount of the hydrophobic monomer ranges between about 99% and about 75% of the copolymer. Support for the recitation of these percentages may be found in Applicants' specification as originally filed on page 13, lines 17-21 and on page 18, lines 16-18.

Applicants submit that amended claims 1 and 18 recite a copolymer that is substantially hydrophobic. Further, Applicants' invention as defined in claim 18 recites a composition suitable for dental applications requiring partially soluble compositions or water insoluble compositions.

In sharp contrast, each of the cited references discloses cement (i.e. water soluble) compositions. Contrary to the Examiner's assertion that the references "mention applicants' glass ionomers and polymers, among them hydrophilic-hydrophobic copolymers, which can be used in dental cement" (emphasis added), it is submitted that the mere mention (almost in passing) of copolymer(s) which may contain a hydrophobic monomer does not anticipate or render obvious Applicants' invention as defined in amended claims 1 and 18 which recites a substantially hydrophobic copolymer. None of the references, either alone or in combination, disclose a substantially hydrophobic copolymer. Further, none of the references, either alone or in combination, disclose a substantially hydrophobic copolymer having an amount of

09/936,692

11

hydrophobic monomer ranging between about 75% and about 99% of the copolymer. The purpose and teaching of each of the references is to provide a composition useful for dental cement only—this actually teaches away from Applicants' invention as defined in amended claims 1 and 18. If the skilled artisan were to use a substantially hydrophobic composition, it is submitted that the composition would no longer function as a dental cement. As such, this would destroy the stated purpose of the patentees' inventions. Thus, it is submitted that the skilled artisan would not be led to, and in fact would be led away from forming a composition utilizing a substantially hydrophobic copolymer.

Further, Applicants submit that claims 11 and 25 have been amended to recite that a ratio of the hydrophilic monomer to the hydrophobic monomer is between about 1:99 and about 25:75; and between about 5:95 and about 20:80, respectively. Support for the recitation of these percentages may be found in Applicants' specification as originally filed on page 13, lines 17-21 and on page 18, lines 16-18.

Still further, regarding Wilson '612 which the Examiner noted as specifying between 5 and 70% water insoluble monomer in col. 5, lines 50-59, it is submitted that this monomer is NOT part of a copolymer. This monomer simply is an emulsion which may be incorporated within the hydrophilic cement composition of Wilson. However, this does NOT form a hydrophobic copolymer—if it did, it would no longer function as a cement composition, thus destroying the stated purpose of Wilson.

For all the reasons stated above, it is submitted that Applicants' invention as defined in amended claims 1 and 18 is not anticipated, taught or rendered obvious by the cited references, either alone or in combination, and patentably defines over the art of record. Claims 2-17 and 19-31 depend ultimately from one of claims 1 or 18. It is submitted that, through this dependency, Applicants' invention as defined in claims 2-17 and 19-31 also is not anticipated, taught or rendered obvious by the cited references, either alone or in combination, and patentably defines over the art of record.

In summary, it is submitted that claims 1-31 are now in a condition suitable for allowance. Should the Examiner believe otherwise, it is submitted that the claims as amended qualify for entry as placing the application in better form for appeal.

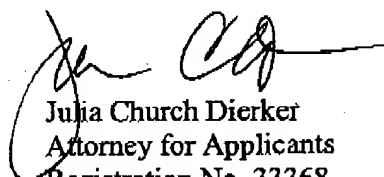
09/936,692

12

Further and favorable consideration is requested. If the Examiner believes it would expedite prosecution of the above-identified application, he is cordially invited to contact Applicants' Attorney at the below-listed telephone number.

Respectfully submitted,

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Dated: February 19, 2004
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